



# Energy Efficiency and Conservation Block Grants



City Council Workshop  
May 19, 2009

# American Recovery and Reinvestment Act Energy Efficiency Overview



- The American Recovery and Reinvestment Act (ARRA) of 2009 appropriated funding to US Dept. of Energy (DOE) to award Energy Efficiency and Conservation Block Grants (EECGB)
- DOE Weatherization & Intergovernmental
  - State and Local Governments will receive funding for:
    - Weatherization Assistance
    - State Energy Program
    - EECBG Program Formula
    - EECBG Program Competitive
    - Appliance Rebate Program

# Kansas EECBG Allocations

- Kansas State Energy Office \$9,593,500
  - Hutchinson \$174,300
  - Kansas City \$1,398,800
  - Lawrence \$858,600
  - Lenexa \$227,100
  - Manhattan \$503,700
  - Olathe \$1,105,400
  - Overland Park \$1,706,300
  - Salina \$201,700
  - Shawnee \$533,100
  - Topeka \$1,240,200
  - **Wichita \$3,519,500**
- Butler County \$254,200
  - Cowley County \$144,100
  - Crawford County \$166,900
  - Finney County \$174,000
  - Johnson County \$552,500
  - Leavenworth County \$304,800
  - Lyon County \$153,800
  - Montgomery County \$149,800
  - Sedgwick County \$485,100
  - Shawnee County \$198,400

# Block Grant Purpose

- To spur economic growth and create/retain jobs
- To assist state, local, and tribal governments in implementing strategies to:
  - 1.Reduce fossil fuel emissions;
  - 2.Reduce total energy use;
  - 3.Improve energy efficiency in the transportation, building, and other appropriate sectors.



# Eligible Uses of Funds



**Primarily for energy efficiency and energy conservation**



1. Strategy Development
2. Building Energy Audits & Retrofits
3. Financial Incentive Programs
4. Energy Efficiency and Conservation Programs for Buildings and Facilities
5. Development and Implementation of Transportation Programs
6. Building Codes and Enforcement
7. Energy Distribution Technologies for EE including CHP & district heating and cooling
8. Material Conservation Programs including source reduction, recycling, and recycled content procurement programs
9. Reduction and Capture of Methane and Greenhouse Gases
10. Traffic Signals and Street Lighting
11. Renewable Energy Technologies on Government Buildings
12. Any Other Appropriate Activity

# Energy Efficiency & Conservation Strategies (EECS)



- Energy Efficiency and Conservation Strategies must include:
  - Summary of Measurable Goals and Objectives
  - Describe how funds will help you achieve goals and objectives
  - Adjacent units of local governments receiving funds
  - Sharing information and coordinating with the State
  - Sustained benefits beyond funding period
  - Strategy to prevent fraud, waste, and abuse
- Two options for EECS submission:
  1. Submit at time of application or
  2. Submit within 120 days of application

# Recommended Project Proposal

Project	Responsible Dept.	Cost	Justification
Energy Projects Revolving Loan Fund for City Facilities*	Public Works	\$703,900 *(See next slide)	20% , Financial Incentive to Fund Energy Saving Projects (sustainable)
Improved Traffic Signal Synchronization	Public Works	\$560,000	This project will synchronize 227 arterial intersections to provide smooth movement of traffic with minimal stops.
McAdams Bike Pathway	Planning/ Public Works	\$1,625,000	Portion of the McAdams Pathway: this segment will connect to the existing I-135 Pathway at 17th St continuing north to 21st Street.
Comprehensive Community Energy Efficiency and Air Emissions Reduction Program	Environmental Services	\$263,700	Development and implementation of voluntary energy conservation and air quality programs with components including public education and partners program for ozone reduction
Cardboard Baler	Century II	\$15,000	Cardboard recycling
Grant Administration	Environmental Services and Finance	\$351,900	10% ,Financial accountability; EECS implementation; measure, track and report progress in projects and goals
Total		\$3,519,500	

# **\*Recommended Revolving Loan Project List**

<b>Project</b>	<b>Responsible Dept.</b>	<b>Cost</b>	<b>Justification</b>
<b>Energy Efficient Chiller and Cooling Tower for ES Building</b>	<b>Public Works</b>	<b>\$ 275,000</b>	<b>Energy Efficient Chiller and Cooling Tower for replacement of 30-yr old unit at Environmental Services Bldg.</b>
<b>Occupancy Sensors for Lighting Control</b>	<b>Public Works</b>	<b>\$ 425,000</b>	<b>Provide and install occupancy sensors to control lighting in spaces in City facilities that are occupied regularly but not continuously.</b>
<b>Network Energy Management System</b>	<b>Public Works</b>	<b>\$ 50,000</b>	<b>Migrate Energy Management System from dial up modems to City network</b>
<b>LED Retrofit for City Parking Garages and Lots</b>	<b>Public Works</b>	<b>\$ 1,105,000</b>	<b>Provide and install new energy efficient Light Emitting Diode (LED) at City Hall; Gander mountain, Hotel at Old Town, Old Town Sq, Old Town Sq Wall Packs. A total of 870 fixtures with an estimated annual energy savings of \$42,540 .</b>
<b>(Projects funded from cost savings)</b>	<b>Total</b>	<b>\$ 1,855,000</b>	



# Other Appropriate Projects

Project	Responsible Dept.	Cost	Justification
Botanica Platinum LEED Demonstration and Education Center	Botanica	\$2,500,000	The building design plans include eco materials, passive solar, water capturing system with thermal heating and cooling.
Biogas Conversion at Lower Arkansas Water Quality Reclamation Facility	Water Utilities	\$1,500,000	Methane Conversion Project Converts Plant-generated Methane to Energy
Solids Handling Upgrade at 4 Mile Creek Water Quality Reclamation Facility	Water Utilities	\$1,500,000	On site Solids Handling upgrade will reduce Vehicle transportation of waste to off site facility
Various Bike Paths	Planning/Public Works	\$11,989,982	Fourteen Various Routes provided by Park Board and Planning Dept.
Total		\$17,489,982	

# Applications Required



## Local Government Applicants:

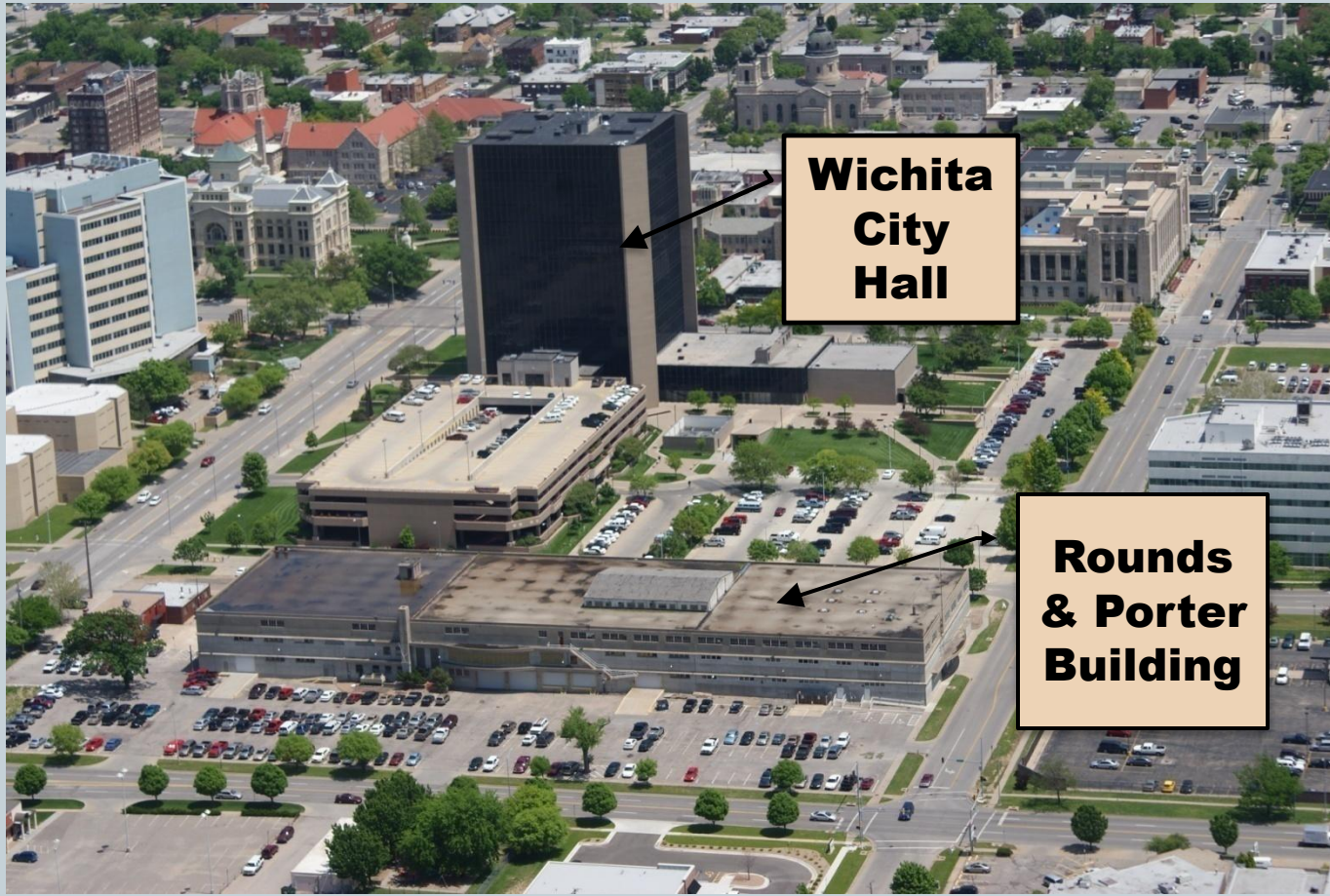
- Direct allocation EECBG grants
  - Registration required for on-line submittal and direct funds receipt - Environmental Services has registered
  - Deadline is June 25, 2009
  - All projects except revolving loan fund must be contracted within 18 months and completed within 36 months. (Projects for the first \$703,000 of revolving loan funding must meet these requirements.)
- EECBG competitive grants to be announced
  - Staff recommends at least two projects for Council consideration
    - ✦ Botanica Platinum LEED Demonstration and Education Center  
\$2,500,000
    - ✦ Biogas Conversion at Lower Arkansas Water Quality Reclamation Facility  
\$1,500,000
- For complete application information and program guidance:  
<http://www.eecbg.energy.gov>

# Process for EECBG Application Submittal



- 5-19-09 – City Council Workshop
- 5-29-09 – Prepare draft EECS
- 6-16-09 – Present recommended EECS, Project List and application components to Council for Approval
- 6-22-09 - Submit Electronic Application  
(Required due date 6-25-09)

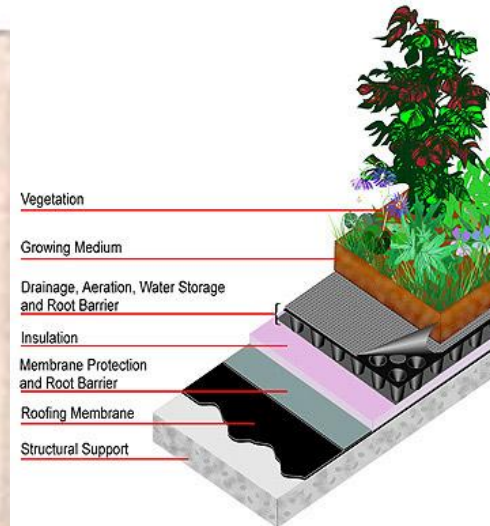
# Wichita Stormwater Demonstration Project for ARRA KDHE Revolving Loan Fund





# ARRA KDHE Revolving Loan Proposal

- **Wichita Stormwater Demonstration Project at Rounds and Porter Building**
- **Permanent Stormwater Best Management Practice – controls rainwater runoff – vegetative green roof, pervious pavement, bioswales, and a rain garden – controls rainwater runoff to improve Arkansas River water quality**
- **May 15, 2009 Deadline for Loan Proposal**
- **City Manager Approved Submittal to meet application deadline**
- **Will present to Council on June 16, 2009**



# Wichita Stormwater Management Demonstration Project

## ARRA Revolving Fund Project Cost



Project	Cost	Funds Requested	Justification
Rounds & Porter Parking Lot with Permanent BMPs	\$ 860,000	None (in CIP)	The Parking Lot located on the West side of Rounds & Porter will include Pervious pavement, Bioswales, and a Rain Garden
Rounds & Porter Vegetative Green Roof	\$ 2,716,000	\$1,993,000	Vegetated Green Roof - Innovative Stormwater Best Management Practice
City CIP Funds	\$ 600,000		Allocated for Roof Rehabilitation
EPA Special Infrastructure Grant	\$ 123,000		Senator Pat Roberts requested funds to be applied to a stormwater technology pilot project

# ARRA KDHE Revolving Fund



- ARRA provided funding through KDHE's Kansas Water Pollution Control Revolving Fund (KWPCRF)
- For Implementation of Innovative "Green" Infrastructure Projects
- May receive funding 100% of eligible Project Costs with 75% Principal Forgiveness
- City has requested a loan amount of **\$1,993,000**
- Revolving fund will forgive 75% of the principal
- If the loan is fully funded by KDHE, **\$1,494,750 (75%) will be forgiven**
- Interest Rate of 3.10% is Fixed throughout the repayment period (up to 20 years allowed) of the remaining balance of **\$498,250**
- City Manager approved application to meet deadline submittal of May 15, 2009 – Staff will place this item on the Council agenda for June 16, 2009